

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for measuring a dielectric constant of a thin film sample, comprising:

irradiating the thin film sample with light at a first incident angle, whereby the light undergoes multiple internal reflections within the thin film sample;

measuring light that has transmitted through or reflected on the thin film sample following said multiple internal reflections; and

taking a ratio of a transmission spectrum or reflection spectrum through or upon a combination of the thin film and a substrate to a transmission spectrum or reflection spectrum through or upon the substrate only as a relative transmittance or relative reflectance, respectively;

determining the relative transmittance or relative reflectance with respect to frequency over a range of frequencies;

determining a complex dielectric constant of the thin film sample based upon a ~~spectrum of the transmitted or reflected light that has undergone said multiple internal reflections~~ the relative transmittance or relative reflectance with respect to frequency over a range of frequencies.

Claim 2 (Previously Presented): The method according to claim 1, wherein a complex dielectric constant of the thin film sample is determined by setting an incident angle of the incident light upon the thin film sample at 60 degrees or greater and smaller than 90 degrees.

Claim 3 (Canceled).

Claim 4 (Previously Presented): The method according to claim 1, wherein the irradiation light is S-polarized light.

Claim 5 (Previously Presented): The method according to claim 1, wherein the irradiation light has a wavelength in a region of a millimeter wave, a sub-millimeter wave or a tera-hertz frequency range of light.

Claim 6 (Currently Amended): An apparatus for measuring a complex dielectric constant of a thin film sample by irradiating the sample with light, comprising:

light irradiating unit that irradiates the thin film sample with light at a first incident angle, whereby the light undergoes multiple internal reflections within the thin film sample;

measuring unit that measures light transmitted through or reflected upon the thin film sample following said multiple internal reflections; and

determining unit that takes a ratio of a transmission spectrum or reflection spectrum through or upon a combination of the thin film and a substrate to a transmission spectrum or reflection spectrum through or upon the substrate only as a relative transmittance or relative reflectance, respectively,

determines the relative transmittance or relative reflectance with respect to frequency over a range of frequencies, and

determines a complex dielectric constant of the thin film sample based upon a ~~spectrum of the transmitted or reflected light that has undergone said multiple internal reflections~~ the relative transmittance or relative reflectance with respect to frequency over a range of frequencies.

Claim 7 (Previously Presented): The apparatus according to claim 6, wherein incident light upon the thin film sample is changeable in the position, and a photodetector for receiving the transmitted or reflected light is also changeable in the position.

Claim 8 (Previously Presented): The apparatus according to claim 6, wherein incident light upon the thin film sample is changeable in incident angle.

Claim 9 (Previously Presented): The apparatus according to claim 7, wherein incident light upon the thin film sample is changeable in incident angle.

Claim 10 (Canceled).

Claim 11 (Previously Presented): The method according to claim 2, wherein the irradiation light has a wavelength in a region of a millimeter wave, a sub-millimeter wave or a tera-hertz frequency range of light.

Claim 12 (Previously Presented): The method according to claim 3, wherein the irradiation light has a wavelength in a region of a millimeter wave, a sub-millimeter wave or a tera-hertz frequency range of light.